

United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/522,340	08/12/2005	Jean-Marc Suau	264369US0PCT	6461
22850 7590 09/19/2007 OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET			EXAMINER	
			BERNSHTEYN, MICHAEL	
ALEXANDRIA, VA 22314		ART UNIT	PAPER NUMBER	
			1713	
		·		
			NOTIFICATION DATE	DELIVERY MODE
			09/19/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com oblonpat@oblon.com jgardner@oblon.com

	Application No.	Applicant(s)			
·	10/522,340	SUAU ET AL.			
Office Action Summary	Examiner	Art Unit			
	Michael Bernshteyn	1713			
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING D. - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period of the second period for reply within the set or extended period for reply will, by statute any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be timwill apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	lely filed the mailing date of this communication. D (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on 25 Ju	<u>une 2007</u> .				
,_	This action is FINAL . 2b) This action is non-final.				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under E	Ex parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.			
Disposition of Claims					
4) Claim(s) 1-8 is/are pending in the application.					
4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.					
6)⊠ Claim(s) <u>1-8</u> is/are rejected.					
7) Claim(s) is/are objected to.	r cleation requirement				
8) Claim(s) are subject to restriction and/o	r election requirement.				
Application Papers					
9)⊠ The specification is objected to by the Examine	er.				
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
Tr) The oath of declaration is objected to by the Ex	Raininer. Note the attached Office	Action of form PTO-152.			
Priority under 35 U.S.C. § 119					
12)⊠ Acknowledgment is made of a claim for foreign a)⊠ All b)□ Some * c)□ None of: 1.⊠ Certified copies of the priority document)-(d) or (f).			
2. Certified copies of the priority documents have been received in Application No					
3. Copies of the certified copies of the priority documents have been received in this National Stage					
application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.					
/					
		•			
Attachment(s)	4) Interview Summary	(PTO_413)			
 Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) 	Paper No(s)/Mail Da	ate			
Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	5) Notice of Informal F 6) Other:	atent Application			

Application/Control Number: 10/522,340 Page 2

Art Unit: 1713

DETAILED ACTION

1. This Office Action follows a response filed on June 25, 2007. No claims have been amended, cancelled or added.

2. Claims 1-8 are active.

Specification

3. The disclosure is objected to because of the following informalities: Table 1 (page 18) is empty. Appropriate correction is required.

Claim Rejections - 35 USC § 103

- 4. The text of this section of Title 35 U.S.C. not included in this action can be found in a prior Office Action.
- 5. Claims 1-8 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Chiefar et al. (WO 99/31144 A1) in view Egraz et al. (U.S. Patent 6,063,884), for the rationale recited in paragraph 5 of Office Action dated on March 23, 2007, and comments below.

Response to Arguments

6. Applicants traverse double patenting rejection and the rejection under 35 U.S.C. § 103(a) of claims 1-8 as being unpatentable over Chiefair et al. (WO 99/31144 A1) in view Egraz et al. (U.S. Patent 6,063,884). Applicant's arguments have been fully considered but they are not persuasive.

In response to Applicants arguments that 1) none of Cheifair et al. and Egraz et 7. al. disclose or suggest synthesizing 'in situ" of the hydrosoluble transfer agent (page 5, 2nd paragraph); 2) the chain transfer agents of Chiefair are not water soluble (pages 5-6, the bridging paragraph), and 3) Chiefair does not disclose that the reactive media for homopolymerization is an aqueous solution, but the second reference of Egraz cures the last issue (page 6, the last paragraph), it is noted the following.

Page 3

With regard to the limitations of instant claims 1-4 and 6-8, Chiefair discloses a free radical polymerization process for synthesizing polymers. The process utilizes sulfur based chain transfer agents and is widely compatible over a range of monomers and reaction conditions. The process produces novel polymers having low polydispersity and predictable specific polymer architecture and molecular weight. The polymers are suitable for use as binders in automobile OEM and refinish coating (abstract).

The process is in batch or semi-batch mode and comprises two stages, the first of which is synthesizing a transfer agent used in the second stage of polymerization (page 7, lines 23-25; page 26, lines 20-22; examples, page 34-64).

As to Applicants notes, there are two remaining differences between Chiefair's polymerization process with living characteristics and instantly claimed process for controlled radical homopolymerization.

The first difference between the polymerization process with living characteristics disclosed by Chiefair and instantly claimed process for controlled radical homopolymerization is that there is no synthesizing "in situ" a hydrosoluble transfer

Art Unit: 1713

agent in Chiefair's process. However, since applicant does not demonstrate the criticality of synthesizing "in situ" a hydrosoluble transfer agent, the selection of any order of performing process step is *prima facie* obvious in the absence of unexpected results. *In re Burhans*, 154 F.2d 690, 69 USPQ 330 (CCPA 1946) and Selection of any order of mixing ingredients is *prima facie* obvious. *In re Gibson* 39 F. 2d 975. 5 USPQ 230 (CCPA). See MPEP § 2144.04

As to Applicants argument that the second difference between the polymerization process disclosed by Chiefair and that claimed by applicant is that the chain transfer agents of Chiefair are not water soluble, it is noted that the process can be carried out in emulsion, solution or suspension in either a batch, semi-batch, continues, or feed mode (page 26, lines 20-21). For solution polymerization, the polymerization medium can be chosen from a wide range of media to suit the monomer(s) being used (page 27, lines 7-8). It is worth to mention that the reactive media of the first stage of synthesis of the transfer agent include water (Procedure 1, page 35, line 32; example 2, page 36, lines 13-14, examples 10 and 11, page 41, etc.), and the amount of chain transfer agents, index polydispersity and molecular weight of the obtained polymers are within the claimed ranges in the most examples (Examples 15-52, pages 45-62).

Chiefair clearly discloses that advantages of his invention are that it is suitable for the producing water born polymers that are water soluble or water dispersible, and it is suitable for producing solvent born polymers that are solvent soluble or solvent dispersible (page 8, lines 1-4).

Art Unit: 1713

Therefore, it is the examiner position that the chain transfer agents of Chiefair composition possess this property (e.g., they are water soluble). Since the USPTO does not have equipment to do the analytical test, the burden is now shifted to the applicant to prove otherwise. *In re Best* 195 USPQ 430, (CCPA 1977).

Even assuming that the claims are not anticipated by the reference, it would have been obvious to one of ordinary skill in the art to make the polymer using the claimed process because it appears that the reference generically embrace the claimed subject matter and the person of ordinary skill in the art would have expected all embodiments of the reference to work. Applicants have not demonstrated that the differences, if any, between the claimed subject matter and the subject matter of the prior art examples give rise to unexpected products.

- 8. In the light of the discussion above, the rejection of record has not been withdrawn. The rejection remains in force.
- 9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Application/Control Number: 10/522,340 Page 6

Art Unit: 1713

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Michael Bernshteyn whose telephone number is 571-

272-2411. The examiner can normally be reached on M-F 8-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, David Wu can be reached on 571-272-1114. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Michael Bernshteyn Patent Examiner Art Unit 1713

MB 09/12/2007

> DAVID W. WU SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 1700